# A NEW "BOBO" FLY FROM THE GULF OF CALIFORNIA (DIPTERA: CHAMAEMYIIDAE: PARALEUCOPIS MEXICANA)

## GEORGE C. STEYSKAL

Cooperating Scientist, Systematic Entomology Laboratory, IIBIII, Agric. Res., Sci. and Educ. Admin., USDA, % U.S. National Museum of Natural History, Washington, D.C. 20560.

Abstract.—A new species of Chamaemyiidae, Paraleucopis mexicana is described at this time to provide a name for use in the following article by Robert L. Smith dealing with its habits. A key to the three species of Paraleucopis is given.

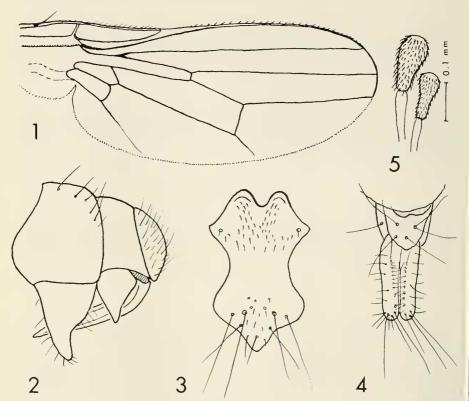
The type-species of the genus *Paraleucopis*, *P. corvina* Malloch, was described in 1913 and remained the sole known species of the genus until I (Steyskal, 1971) described *P. boydensis*. Malloch's species was taken in New Mexico, and I recorded a specimen from Dallas, Texas when I described *P. boydensis* from the Boyd Desert Research Center, Riverside County, California. The third species, here described, is from the shores and islands of the Gulf of California (States of Sonora, Baja California, and Baja California Sur). The designation "bobo," a Spanish language vernacular name for these flies, seems applicable to all three species, inasmuch as the little that is known of the habits of the first two species seems to indicate habits common to all of them.

Paraleucopis mexicana Steyskal, New Species Figs. 1–5

Inasmuch as all distinctive features that I have been able to discern are cited in the following key and figures, they may serve as a formal description of the species.

### KEY TO SPECIES OF PARALEUCOPIS MALLOCH

1(2). Hindfemur yellowish; last 2 or 3 segments of all tarsi blackish or at least distinctly infuscated; antennae broadly separated at bases by about  $1.5 \times$  basal diameter of one of them; wing length of male 2.3-2.5 mm, of female 2.5-2.9 mm; wing venation as in Fig. 1,



Figs. 1–5. *Paraleucopis mexicana*. 1, Wing. 2, Lateral view of male postabdomen. 3, Basal dorsal sclerite of ovipositor. 4, Tip of ovipositor, dorsal view. 5, Spermathecae.

same in both sexes: orbital setae in 2 pairs, nearly as long as ocellar setae; parafacials, lateral margin of face, and part of gena immediately below eye usually yellowish in contrast with adjacent black parts of head; postabdomen of male as in Fig. 2, surstylus with sinuate posterior margin, basal  $\frac{1}{2}$  of surstylus considerably broader than apical  $\frac{1}{2}$  but both halves tapered in profile and with several marginal setae; ovipositor of female as in Figs. 3–5, basal dorsal sclerite (Fig. 3) constricted in middle, basal and apical portions of nearly equal width ..... *mexicana*, new species (Holotype  $\delta$ , allotype, and 10 paratypes, Kino Bay, Sonora, Mexico, 8 April 1978, R. L. Smith, in the U.S. National Museum of Natural History, Washington, D.C.; topotypical paratypes in the University of Arizona; numerous paratypes from Cabo San Lucas, Isla Datil, Isla Ildefonso, Isla La Partida, Isla Salsipuedes, Isla San Lorenzo, Isla Raza, and Pond Island, all in either Baja

California or Baja California Sur, and deposited in the U.S. National Museum of Natural History, California Academy of Sciences, and Loma Linda University).

- 2(1). Hindfemur mostly black; tarsi wholly yellowish, at most with last 2 segments a little infuscated; antennae separated by no more than diameter of base of an antenna; wing length of male at most 2.4 mm, of female 2.5 mm; orbital setae various; parts of head around lower eye black.
- 3(4). Fronto-orbital setae 2, well developed; male postabdomen with posterior margin of surstylus zigzagged, basal ½ of surstylus about 3× as wide as digitiform apical ½, with a few posterior setae on basal ½; female with basal dorsal sclerite of ovipositor mearly parallel-sided, basal margin arcuate and with small mesal emargination ...... boydensis Stevskal
- 4(3). Fronto-orbital setae minute, scarcely distinguishable: male postabdomen with posterior margin of surstylus concave except close to base, without setae, surstylus rather evenly tapering to sharp tip; female with basal dorsal sclerite of ovipositor with concave lateral margins, basal margin biarcuate, entire sclerite narrowest medially and much the widest basally ...... corvina Malloch

### Acknowledgments

I am very grateful to Robert L. Smith, R. E. Ryckman, and C. P. Christianson for making these interesting specimens available to me and for permission to deposit many of them in the U.S. National Museum of Natural History.

#### LITERATURE CITED

Steyskal, G. C. 1971. The genus Paraleucopis Malloch (Diptera: Chamaemyiidae), with one new species. Entomol. News 82:1–4.